INDEX

	PAGE
Acoustical Problems in the Heating and Ventilating of Buildings, by V. O.	
KNUDSEN Discussion	211
ADDAMS, HOMER, Discussion of A Study of Intermittent Operation of Oil	
Burners Aeberly, J. J., Discussion of Changes in Ionic Content of Air in Occupied	329
Rooms Ventilated by Natural and by Mechanical Methods	209
ALGREN, A. B., AND ROWLEY, F. B., Thermal Properties of Building Materials Discussion	491 505
ALGREN, A. B., Discussion of Thermal Properties of Building Materials	510
ALT, H. L., Discussion of How to Use the Effective Temperature Index and Comfort Charts	418
Anderson, F. P., Discussion of Changes in Ionic Content of Air in Occupied Rooms Ventilated by Natural and by Mechanical Methods	208
Andree, C. A., Discussion of Acoustical Problems in the Heating and Ventilating of Buildings	224
Annual Meeting, 1932, Thirty-Eighth	1
ARTSAY, N., Discussion of Some Fundamental Considerations of Corrosion in Steam and Condensate Lines	178
A.S.H.V.E. Standard Code for Testing and Rating Steam Unit Ventilators	25
A.S.H.V.E. Ventilation Standards	383
Automatic Gas Burners by C. G. Segeler	543 552
	002
B	
BACKSTROM, R. E., Discussions on Heat Transmission as Influenced by Heat Capacity and Solar Radiation Importance of Radiation in Heat Transfer Through Air Spaces	283 94
BACKSTROM, R. E., Discussions on Heat Transmission as Influenced by Heat Capacity and Solar Radiation Importance of Radiation in Heat Transfer Through Air Spaces Thermal Properties of Building Materials	
BACKSTROM, R. E., Discussions on Heat Transmission as Influenced by Heat Capacity and Solar Radiation Importance of Radiation in Heat Transfer Through Air Spaces Thermal Properties of Building Materials BARGETT, W. H., AND GIESECKE, F. E., Loss of Head in Copper Pipe and	94 508
BACKSTROM, R. E., Discussions on Heat Transmission as Influenced by Heat Capacity and Solar Radiation Importance of Radiation in Heat Transfer Through Air Spaces Thermal Properties of Building Materials BADGETT, W. H., AND GIESECKE, F. E., Loss of Head in Copper Pipe and Fittings Discussion	94
BACKSTROM, R. E., Discussions on Heat Transmission as Influenced by Heat Capacity and Solar Radiation Importance of Radiation in Heat Transfer Through Air Spaces Thermal Properties of Building Materials BADGETT, W. H., AND GIESECKE, F. E., Loss of Head in Copper Pipe and Fittings Discussion Supplementary Friction Heads in One-Inch Cast-Iron Tees	94 508 529 538 111
BACKSTROM, R. E., Discussions on Heat Transmission as Influenced by Heat Capacity and Solar Radiation Importance of Radiation in Heat Transfer Through Air Spaces Thermal Properties of Building Materials BADGETT, W. H., AND GIESECKE, F. E., Loss of Head in Copper Pipe and Fittings Discussion Supplementary Friction Heads in One-Inch Cast-Iron Tees BADGETT, W. H., Discussion of Loss of Head in Copper Pipe and Fittings	94 508 529 538 111 542
BACKSTROM, R. E., Discussions on Heat Transmission as Influenced by Heat Capacity and Solar Radiation Importance of Radiation in Heat Transfer Through Air Spaces Thermal Properties of Building Materials BADGETT, W. H., AND GIESECKE, F. E., Loss of Head in Copper Pipe and Fittings Discussion Supplementary Friction Heads in One-Inch Cast-Iron Tees BADGETT, W. H., Discussion of Loss of Head in Copper Pipe and Fittings BARKER, A. H., Discussion of Performance of Convector Heaters	94 508 529 538 111 542 360
BACKSTROM, R. E., Discussions on Heat Transmission as Influenced by Heat Capacity and Solar Radiation Importance of Radiation in Heat Transfer Through Air Spaces Thermal Properties of Building Materials BADGETT, W. H., AND GIESECKE, F. E., Loss of Head in Copper Pipe and Fittings Discussion Supplementary Friction Heads in One-Inch Cast-Iron Tees BADGETT, W. H., Discussion of Loss of Head in Copper Pipe and Fittings BARKER, A. H., Discussion of Performance of Convector Heaters BARKER, A. H., Room Warming by Radiation Discussion	94 508 529 538 111 542
BACKSTROM, R. E., Discussions on Heat Transmission as Influenced by Heat Capacity and Solar Radiation Importance of Radiation in Heat Transfer Through Air Spaces Thermal Properties of Building Materials BADGETT, W. H., AND GIESECKE, F. E., Loss of Head in Copper Pipe and Fittings Discussion Supplementary Friction Heads in One-Inch Cast-Iron Tees BADGETT, W. H., Discussion of Loss of Head in Copper Pipe and Fittings BARKER, A. H., Discussion of Performance of Convector Heaters BARKER, A. H., Room Warming by Radiation Discussion BELING, E. H., AND OTIS, G. E., Discussion of Investigation of Air Outlets in Class Room Ventilation	94 508 529 538 111 542 360 331
BACKSTROM, R. E., Discussions on Heat Transmission as Influenced by Heat Capacity and Solar Radiation Importance of Radiation in Heat Transfer Through Air Spaces Thermal Properties of Building Materials BADGETT, W. H., AND GIESECKE, F. E., Loss of Head in Copper Pipe and Fittings Discussion Supplementary Friction Heads in One-Inch Cast-Iron Tees BADGETT, W. H., Discussion of Loss of Head in Copper Pipe and Fittings BARKER, A. H., Discussion of Performance of Convector Heaters BARKER, A. H., Room Warming by Radiation Discussion BELING, E. H., AND OTIS, G. E., Discussion of Investigation of Air Outlets in Class Room Ventilation BENJAMIN, L. C., CHOATE, S. P., AND YAGLOU, C. P., Changes in Ionic Content of Air in Occupied Rooms Ventilated by Natural and by Mechanical	94 508 529 538 111 542 360 331 347 488
BACKSTROM, R. E., Discussions on Heat Transmission as Influenced by Heat Capacity and Solar Radiation	94 508 529 538 111 542 360 331 347 488
BACKSTROM, R. E., Discussions on Heat Transmission as Influenced by Heat Capacity and Solar Radiation Importance of Radiation in Heat Transfer Through Air Spaces Thermal Properties of Building Materials BADGETT, W. H., AND GIESECKE, F. E., Loss of Head in Copper Pipe and Fittings Discussion Supplementary Friction Heads in One-Inch Cast-Iron Tees BADGETT, W. H., Discussion of Loss of Head in Copper Pipe and Fittings BARKER, A. H., Discussion of Performance of Convector Heaters BARKER, A. H., Room Warming by Radiation Discussion BELING, E. H., AND OTIS, G. E., Discussion of Investigation of Air Outlets in Class Room Ventilation BENJAMIN, L. C., CHOATE, S. P., AND YAGLOU, C. P., Changes in Ionic Content of Air in Occupied Rooms Ventilated by Natural and by Mechanical Methods Discussion BLACK, L. V., AND MILLER, R. A., Transmission of Radiant Energy Through	94 508 529 538 111 542 360 331 347 488
BACKSTROM, R. E., Discussions on Heat Transmission as Influenced by Heat Capacity and Solar Radiation Importance of Radiation in Heat Transfer Through Air Spaces Thermal Properties of Building Materials BADGETT, W. H., AND GIESECKE, F. E., Loss of Head in Copper Pipe and Fittings Discussion Supplementary Friction Heads in One-Inch Cast-Iron Tees BADGETT, W. H., Discussion of Loss of Head in Copper Pipe and Fittings BARKER, A. H., Discussion of Performance of Convector Heaters BARKER, A. H., Room Warming by Radiation Discussion BELING, E. H., AND OTIS, G. E., Discussion of Investigation of Air Outlets in Class Room Ventilation BENJAMIN, L. C., CHOATE, S. P., AND YAGLOU, C. P., Changes in Ionic Content of Air in Occupied Rooms Ventilated by Natural and by Mechanical Methods Discussion BLACK, L. V., AND MILLER, R. A., Transmission of Radiant Energy Through Glass	94 508 529 538 111 542 360 331 347 488 191 201
BACKSTROM, R. E., Discussions on Heat Transmission as Influenced by Heat Capacity and Solar Radiation Importance of Radiation in Heat Transfer Through Air Spaces Thermal Properties of Building Materials BADGETT, W. H., AND GIESECKE, F. E., Loss of Head in Copper Pipe and Fittings Discussion Supplementary Friction Heads in One-Inch Cast-Iron Tees BADGETT, W. H., Discussion of Loss of Head in Copper Pipe and Fittings BARKER, A. H., Discussion of Performance of Convector Heaters BARKER, A. H., Room Warming by Radiation Discussion BELING, E. H., AND OTIS, G. E., Discussion of Investigation of Air Outlets in Class Room Ventilation BENJAMIN, L. C., CHOATE, S. P., AND YAGLOU, C. P., Changes in Ionic Content of Air in Occupied Rooms Ventilated by Natural and by Mechanical Methods Discussion BLACK, L. V., AND MILLER, R. A., Transmission of Radiant Energy Through Glass Discussion BLACKSHAW, J. L., AND HOUGHTEN, F. C., Natural Wind Velocity Gradients	94 508 529 538 111 542 360 331 347 488
BACKSTROM, R. E., Discussions on Heat Transmission as Influenced by Heat Capacity and Solar Radiation Importance of Radiation in Heat Transfer Through Air Spaces Thermal Properties of Building Materials BADGETT, W. H., AND GIESECKE, F. E., Loss of Head in Copper Pipe and Fittings Discussion Supplementary Friction Heads in One-Inch Cast-Iron Tees BADGETT, W. H., Discussion of Loss of Head in Copper Pipe and Fittings BARKER, A. H., Discussion of Performance of Convector Heaters BARKER, A. H., Room Warming by Radiation Discussion BELING, E. H., AND OTIS, G. E., Discussion of Investigation of Air Outlets in Class Room Ventilation BENJAMIN, L. C., CHOATE, S. P., AND YAGLOU, C. P., Changes in Ionic Content of Air in Occupied Rooms Ventilated by Natural and by Mechanical Methods Discussion BLACK, L. V., AND MILLER, R. A., Transmission of Radiant Energy Through Glass	94 508 529 538 111 542 360 331 347 488 191 201

	PAGE
BLACKSHAW, J. L., PUGH, E. M., McDermott, Paul, and Houghten, F. C., Heat Transmission as Influenced by Heat Capacity and Solar Radiation Discussion	231 279
BOOTH, C. A., Discussion of Velocity Characteristics of Hoods Under Suction BRABBÉE, C. W., Discussions on A Study of Intermittent Operation of Oil Burners	395
Room Warming by Radiation	350 61
Branche, N. T., Discussion of Automatic Gas Burners	553
BRODERICK, E. L., KRATZ, A. P., AND FAHNESTOCK, M. K., Tests of Convectors in a Warm Wall Testing Booth Discussion	511 525
Brown, A. I., Discussion of Velocity Characteristics of Hoods Under Suction. Buildings, Acoustical Problems in the Heating and Ventilating of, by V. O. KNUDSEN Discussion	394 211 222
BUSCH, J. S., Discussion of Thermal Properties of Building Materials	509
C	
CAMPBELL, E. K., Discussion of Heat Transmission as Influenced by Heat Capacity and Solar Radiation	284
Carbon Monoxide Distribution in Relation to the Ventilation of a One-Floor Garage, by F. C. HOUGHTEN AND PAUL McDermott	424 462
CARRIER, W. H., Discussions on Acoustical Problems in the Heating and Ventilating of Buildings A Study of Intermittent Operation of Oil Burners Changes in Ionic Content of Air in Occupied Rooms Ventilated by Natural	222 328
and by Mechanical Methods Coefficients as Affected by Direction of Wind Conductivity of Concrete Field Studies of Office Building Cooling Heat Transmission as Influenced by Heat Capacity and Solar Radiation How to Use the Effective Temperature Index and Comfort Charts Importance of Radiation in Heat Transfer Through Air Spaces Room Warming by Radiation Transmission of Radiant Energy Through Glass	210 46 62 316 284 421 95 347 74
CASSELL, J. D., AND NESBITT, A. J., Discussion of Investigation of Air Outlets in Class Room Ventilation	486
Changes in Ionic Content of Air in Occupied Rooms Ventilated by Natural and by Mechanical Methods, by C. P. Yaglou, L. C. Benjamin and S. P. Choate	191
Discussion	201
CHAPPELL, E. L., AND SPELLER, F. N., Discussion of Some Fundamental Considerations of Corrosion in Steam and Condensate Lines	171
Charts (Report of Tech. Adv. Com. on Re-Study of Comfort Chart and Comfort Line, C. P. Yaglou, Chm.), How to Use the Effective Temperature Index and Comfort	410
Discussion	418
Comfort Charts	420
CHOATE, S. P., YAGLOU, C. P., AND BENJAMIN, L. C., Changes in Ionic Content of Air in Occupied Rooms Ventilated by Natural and by Mechanical Methods	191
Discussion	201

INDEX	то	TRANSACTIONS

	PAGE
CHRISLER, V. L., Discussion of Acoustical Problems in the Heating and Venti-	226
lating of Buildings	505
CLOW, M. T., Discussion of Automatic Gas Burners	557
Code for Testing and Rating Steam Unit Ventilators, A.S.H.V.E. Standard	25
Coefficients as Affected by Direction of Wind, Surface, by F. B. Rowley and W. A. Eckley	33
Discussion	44
COLE, E. Q., Discussion of Changes in Ionic Content of Air in Occupied Rooms	200
Ventilated by Natural and by Mechanical Methods	209
Discussion	55
Conductivity of Concrete, by F. C. HOUGHTEN AND CARL GUTBERLET Discussion	47 55
CONNER, R. M., Discussions on Automatic Gas Burners Tests of Convectors in a Warm Wall Testing Booth	560 525
Convector Heaters, Performance of, by A. P. Kratz and M. K. Fahnestock Discussion	351 359
Convectors in a Warm Wall Testing Booth, Tests of, by A. P. Kratz, M. K. FAHNESTOCK AND E. L. BRODERICK	511
Discussion	525
Cooling, Field Studies of Office Building, by J. H. Walker, S. S. Sanford and E. P. Wells Discussion	285 311
Copper Pipe and Fittings, Loss of Head in, by F. E. GIESECKE AND W. H.	0
BAGGETT	529 538
Corrosion in Steam and Condensate Lines, Some Fundamental Considerations of, by R. E. HALL AND A. R. MUMFORD	121 171
	1,1
D	
DALLAVALLE, J. M., Velocity Characteristics of Hoods Under Suction	387
Discussion	394
Degen, J. W., Discussion of Some Fundamental Considerations of Corrosion in Steam and Condensate Lines	180
R	
ECKLEY, W. A., AND ROWLEY, F. B., Surface Coefficients as Affected by Direc-	22
tion of Wind	33 44
EINERT, H. E., AND OWENS, F. R., Discussion of Some Fundamental Considerations of Corrosion in Steam and Condensate Lines	184
EWALD, W., Discussions on How to Use the Effective Temperature Index and	422
Comfort Charts Investigation of Air Outlets in Class Room Ventilation	489
Natural Wind Velocity Gradients Near a Wall	409
Tests of Convectors in a Warm Wall Testing Booth	526
EYRING, C. F., Discussion of Acoustical Problems in the Heating and Venti- lating of Buildings	227
P	
FAHNESTOCK, M. K., AND KRATZ, A. P., Performance of Convector Heaters	351
Discussion	359

GE

	PAGE
FAHNESTOCK, M. K., BRODERICK, E. L., AND KRATZ, A. P., Tests of Convectors in a Warm Wall Testing Booth Discussion	511 525
FECHHEIMER, C. J., Discussion of Velocity Characteristics of Hoods Under Suction	395
FIDELIUS, W. R., AND NEWCOMB, RAYMOND, Discussion of Some Fundamental Considerations of Corrosion in Steam and Condensate Lines	173
Field Studies of Office Building Cooling, by J. H. Walker, S. S. Sanford and E. P. Wells Discussion	285 311
FLEISHER, W. L., Discussions on Conductivity of Concrete	62
FOWLER, L. J., Discussion of Room Warming by Radiation	347 361
Discussion Fuels, A Study of the Combustible Nature of Solid, by R. V. Frost	375 361
Discussion	375
Galt, R. H., Discussion of Acoustical Problems in the Heating and Ventilating of Buildings	227
Garage, Carbon Monoxide Distribution in Relation to the Ventilation of a One- Floor, by F. C. HOUGHTEN AND PAUL McDermott	424 462
Gas Burners, Automatic, by C. G. Segeler Discussion	543 552
GATES, R. M., Discussion of Some Fundamental Considerations of Corrosion in Steam and Condensate Lines	178
GIESECKE, F. E., AND BADGETT, W. H., Loss of Head in Copper Pipe and Fittings	529
Discussion Supplementary Friction Heads in One-Inch Cast-Iron Tees	538 111
GOFF, J. A., Discussion of Heat Transmission as Influenced by Heat Capacity and Solar Radiation	279
GUTBERLET, CARL, AND HOUGHTEN, F. C., Conductivity of Concrete Discussion Heat Emission from Iron and Copper Pipe	47 55 97
Discussion	109
н	
HALL, R. E., AND MUMFORD, A. R., Some Fundamental Considerations of Corrossinian Steam and Condensate Lines	121
HALL, R. E., Discussion of Some Fundamental Considerations of Corrosion in	171
Steam and Condensate Lines HANBURGER, F. W., Discussion of A Study of the Combustible Nature of Solid	188
HANSON, O. B., Discussion of Acoustical Problems in the Heating and Venti-	375 225
HARDING, L. A., Discussions on Conductivity of Concrete	61 282 45 75

PA	AGI
	327 556
HARTMAN, F. E., Discussion of Changes in Ionic Content of Air in Occupied Rooms Ventilated by Natural and by Mechanical Methods	203
	97
	77
Heat Transmission as Influenced by Heat Capacity and Solar Radiation, by F. C. Houghten, J. L. Blackshaw, E. M. Pugh and Paul McDermott Discussion	231 279
	110 541
	387 394
	397 409
HOUGHTEN, F. C., AND GUTBERLET, CARL, Conductivity of Concrete Discussion Heat Emission from Iron and Copper Pipe Discussion 1	47 55 97 109
Discussion 4	424 462
	231 279
HOUGHTEN, F. C., Discussions on Changes in Ionic Content of Air in Occupied Rooms Ventilated by Natural and by Mechanical Methods	207 60 315 110 122 189 74
	110
HOWATT, JOHN, Discussion of Investigation of Air Outlets in Class Room Venti- lation	87
HUNT, F. L., Discussion of Acoustical Problems in the Heating and Ventilating of Buildings	228
HUNTINGTON, E., Discussion of Changes in Ionic Content of Air in Occupied	201
HUTZEL, H. F., Discussions on Loss of Head in Copper Pipe and Fittings 5	38
HVOSLEF, F. W., Discussions on A Study of Intermittent Operation of Oil Burners	27 09 27

I

•	PAGE
Importance of Radiation in Heat Transfer through Air Spaces, by E. R. QUEER Discussion	77 89
In Memoriam	562
Investigation of Air Outlets in Class Room Ventilation, by G. L. Larson, D. W. Nelson and R. W. Kubasta	463
Discussion Ionic Content of Air in Occupied Rooms Ventilated by Natural and by Mechanical Methods, Changes in, by C. P. Yaglou, L. C. Benjamin and S. P.	486
CHOATE Discussion	191 201
J	
JOHNS, H. B., Discussion of Automatic Gas Burners	559
JONES, E. A., Discussion of Automatic Gas Burners	560
JONES, LEWIS, Discussion of Some Fundamental Considerations of Corrosion in Steam and Condensate Lines	174
K	
KING, W. J., Discussions on A Study of Intermittent Operation of Oil Burners	328
Heat Emission from Iron and Copper Pipe	109
KNUDSEN, V. O., Acoustical Problems in the Heating and Ventilating of Buildings. Discussion	211 222
KNUDSEN, V. O., Discussions on Acoustical Problems in the Heating and Venti- lating of Buildings	
Conductivity of Concrete	62
Kratz, A. P., and Fahnestock, M. K., Performance of Convector Heaters Discussion	351 359
Kratz, A. P., Discussions on Tests of Convectors in a Warm Wall Testing	527
Transmission of Radiant Energy Through Glass	76
in a Warm Wall Testing Booth	511 525
KUBASTA, R. W., LARSON, G. L., AND NELSON, D. W., Investigation of Air Outlets in Class Room Ventilation	463
Discussion	489
L	
LARSON, G. L., Discussion of A Study of Intermittent Operation of Oil Burners	328
LARSON, G. L., NELSON, D. W., AND KUBASTA, R. W., Investigation of Air Outlets in Class Room Ventilation	463
Discussion	
LEGRAND, J., Discussion of Loss of Head in Copper Pipe and Fittings LLOYD, E. C., Discussion of Acoustical Problems in the Heating and Ventilating	539
of Buildings Loss of Head in Copper Pipe and Fittings, by F. E. GIESECKE AND W. H.	228
BADGETT Discussion	529 538
Vertilated by Natural and by Mechanical Methods	206

M

	PAGE
MACINTIRE, H. J., Discussion of Field Studies of Office Building Cooling	313
Materials, Thermal Properties of Building, by F. B. Rowley and A. B. Algren Discussion	491 505
McConnell, W. J., Discussion of Changes in Ionic Content of Air in Occupied Rooms Ventilated by Natural and by Mechanical Methods	202
McDermott, Paul, and Houghten, F. C., Carbon Monoxide Distribution in Relation to the Ventilation of a One-Floor Garage	424 462
McDermott, Paul, Houghten, F. C., Blackshaw, J. L., and Pugh, E. M., Heat Transmission as Influenced by Heat Capacity and Solar Radiation Discussion	231 279
McMillan, F. R., Discussion of Conductivity of Concrete	58
Memoriam, In	562
MENSING, F. D., Discussion of Performance of Convector Heaters	360
MILENER, E. D., Discussion of Automatic Gas Burners	. 560
MILLER, R. A., AND BLACK, L. V., Transmission of Radiant Energy Through	63
Glass Discussion	74
Montgomery, W. R., Discussion of Changes in Ionic Content of Air in Occupied Rooms Ventilated by Natural and by Mechanical Methods	202
MUMFORD, A. R., AND HALL, R. E., Some Fundamental Considerations of Corrosion in Steam and Condensate Lines	121
Discussion	171
N	
Natural Wind Velocity Gradients Near a Wall, by J. L. BLACKSHAW AND F. C.	
HOUGHTEN Discussion	397 409
Nelson, D. W., Kubasta, R. W., and Larson, G. L., Investigation of Air Outlets in Class Room Ventilation	463
Discussion	, 489
NESBITT, A. J., AND CASSELL, J. D., Discussion of Investigation of Air Outlets in Class Room Ventilation	486
NESBITT, A. J., Discussion of How to Use the Effective Temperature Index and Comfort Charts	422
NEWCOMB, RAYMOND, AND FIDELIUS, W. R., Discussion of Some Fundamental Considerations of Corrosion in Steam and Condensate Lines	173
NEWELL, H. D. Discussion of Some Fundamental Considerations of Corrosion	176
in Steam and Condensate Lines Nicholls, P., Discussions on A Study of Intermittent Operation of Oil Burners	328
Importance of Radiation in Heat Transfer Through Air Spaces Surface Coefficients as Affected by Direction of Wind	92 44
Nobis, H. M., Discussion of Investigation of Air Outlets in Class Room Venti- lation	489
0	
OATES, W. A., Discussion of Automatic Gas Burners	552
OFFNER, A. J., Discussion of Room Warming by Radiation	349
Oil Burners, A Study of Intermittent Operation of, by L. E. SEELEY AND	
J. H. Powers Discussion	317 325

	PAGE
OTIS, G. E., AND BELING, E. H., Discussion of Investigation of Air Outlets in	LAGE
Class Room Ventilation	488
tions of Corrosion in Steam and Condensate Lines	184
P	
PARKINSON, J. S., Discussion of Acoustical Problems in the Heating and Ventilating of Buildings	223
Performance of Convector Heaters by A. P. Kratz and M. K. Fahnestock Discussion	351 359
Pipe. Heat Emission from Iron and Copper, by F. C. HOUGHTEN AND CARL GUTBERLET Discussion	97 109
POWERS, J. H., AND SEELEY, L. E., A Study of Intermittent Operation of Oil Burners	317
Discussion	325
Program, 38th Annual Meeting Semi-Annual Meeting, 1932	22 376
Pugh, E. M., McDermott. Paul, Houghten, F. C., and Blackshaw, J. L., Heat Transmission as Influenced by Heat Capacity and Solar Radiation Discussion	231 279
Q	
QUEER, E. R., Discussions on Conductivity of Concrete Transmission of Radiant Energy Through Glass QUEER, E. R., Importance of Radiation in Heat Transfer Through Air Spaces. Discussion	57 76 77 , 95
R	
RACK, E. C., Discussions on Conductivity of Concrete Importance of Radiation in Heat Transfer Through Air Spaces Radiant Energy Through Glass, Transmission of, by R. A. MILLER AND L. V.	56 91
BLACK Discussion	63 74
Radiation, Room Warming by, by A. H. Barker Discussion	331 347
RALSTON, L. T. M., Discussion of Velocity Characteristics of Hoods Under Suction	395
RANDALL, W. C., Discussions on Carbon Monoxide Distribution in Relation to the Ventilation of a One-Floor Garage	462
Investigation of Air Outlets in Class Room Ventilation	488 61
REID, H. P., Discussion of Conductivity of Concrete	4
Committee on Meetings Program	16
Committee on Research Committee on Ventilation Standards Chairman's discussion	378 378
Council	1
Finance Committee	17
Guide Publication Committee Publication Committee	8
Resolutions Committee	381
Secretary	2

INDEX TO IRANSACTIONS	3/1
	PAGE
Tellers of Election	17
Treasurer RICKETTS, E. B., Discussion of Some Fundamental Considerations of Corrosion	3
in Steam and Condensate Lines	178
ROBSON, J. J., Discussion of Velocity Characteristics of Hoods Under Suction	395
Room Warming by Radiation, by A. H. BARKER Discussion	331 347
ROSENAU, M. J., Discussion of Changes in Ionic Content of Air in Occupied Rooms Ventilated by Natural and by Mechanical Methods	207
ROWLEY, F. B., AND ALGREN, A. B., Thermal Properties of Building Materials Discussion	491 505
ROWLEY, F. B., AND ECKLEY, W. A., Surface Coefficients as Affected by Direction of Wind Discussion	33
ROWLEY, F. B., Discussions on Conductivity of Concrete Heat Emission from Iron and Copper Pipe Importance of Radiation in Heat Transfer Through Air Spaces Some Fundamental Considerations of Corrosion in Steam and Condensate	55 110 95
Lines Thermal Properties of Building Materials Transmission of Radiant Energy Through Glass	188 509 75
s	
SANFORD, S. S., Discussion of Field Studies of Office Building Cooling314, 315	. 316
SANFORD, S. S., WELLS, E. P., AND WALKER, J. H., Field Studies of Office Building Cooling Discussion	285 311
SCANLAN, C. J., Discussion of Investigation of Air Outlets in Class Room Venti-	488
SCHMIDT, H. W., Discussion of How to Use the Effective Temperature Index and Comfort Charts	420
SEELEY, L. E., AND POWERS, J. H., A Study of Intermittent Operation of Oil	420
Burners	317 325
SEELEY, L. E., Discussion of Performance of Convector Heaters	359
Segeler, C. G., Automatic Gas Burners	543 552
Segeler, C. G., Discussions on Automatic Gas Burners Natural Wind Velocity Gradients Near a Wall	559 409
Semi-Annual Meeting, 1932	377
Severns, W. H., Discussion of A Study of Intermittent Operation of Oil Burners	325
SHENK, A. B., Discussion of Conductivity of Concrete	60
Shoddon, J. G., Discussion of Surface Coefficients as Affected by Direction of Wind	45
Shoudy, W. A., Discussion of Some Fundamental Considerations of Corrosion in Steam and Condensate Lines	180
SMITH, L. L., AND WALTON, H. L., Discussion of Field Studies of Office Building Cooling	311
SMITH, L. L., Discussion of Acoustical Problems in the Heating and Ventilating of Buildings	228
SMITH, T. B., Discussion of Heat Emission from Iron and Copper Pipe	110

	PAGE
Solar Radiation, Heat Transmission as Influenced by Heat Capacity and, by F. C. Houghten, J. L. Blackshaw, E. M. Pugh and Paul McDermott	231
Discussion	279
by R. E. HALL AND A. R. MUMFORD Discussion	121 171
SPELLER, F. N., AND CHAPPELL, E. L., Discussion of Some Fundamental Considerations of Corrosion in Steam and Condensate Lines	171
Standards, A.S.H.V.E. Ventilation	383
STARK, W. E., Discussion of Automatic Gas Burners	555
Steam Unit Ventilators, A.S.H.V.E. Standard Code for Testing and Rating	25
Stevenson, A. R., Discussions on Acoustical Problems in the Heating and Ventilating of Buildings	230
Changes in Joint Content of Air in Occupied Rooms Ventilated by Natural	
and by Mechanical Methods Field Studies of Office Building Cooling	209 315
Heat Transmission as Influenced by Heat Capacity and Solar Radiation	283
Study of Intermittent Operation of Oil Burners, A, by L. E. Seeley and J. H. Powers	317
Discussion	325
Study of the Combustible Nature of Solid Fuels, A, by R. V. Frost	361
Discussion	375
Supplementary Friction Heads in One-Inch Cast-Iron Tees, by F. E. GIESECKE AND W. H. BADGETT	111
Surface Coefficients as Affected by Direction of Wind, by F. B. ROWLEY AND	
W. A. Eckley Discussion	33 44
SVENSON, E. B., Discussion of Importance of Radiation in Heat Transfer Through Air Spaces	92
т	
TO COLUMN TO SELECT THE COLUMN TO THE COLUMN	
Tees, Supplementary Friction Heads in One-Inch Cast-Iron, by F. E. GIESECKE AND W. H. BADGETT	111
Tests of Convectors in a Warm Wall Testing Booth, by A. P. Kratz, M. K. Fahnestock and E. L. Broderick	511
Discussion	525
Thermal Properties of Building Materials, by F. B. ROWLEY AND A. B. ALGREN Discussion	491 505
Thirty-Eighth Annual Meeting, 1932	1
TIMMIS, W. W., Discussion of Some Fundamental Considerations of Corrosion in Steam and Condensate Lines	187
TOMLINSON, M. C. W., Discussions on Conductivity of Concrete	62
How to Use the Effective Temperature Index and Comfort Charts TORRANCE, HENRY, Discussion of Changes in Ionic Content of Air in Occupied	419
Rooms Ventilated by Natural and by Mechanical Methods	208
BLACK Discussion	63 74
TRAY, S. E., Discussion of Some Fundamental Considerations of Corrosion in Steam and Condensate Lines	176
U	

Unit Ventilators, A.S.H.V.E. Standard Code for Testing and Rating Steam.... 25

V	
Velocity Characteristics of Hoods Under Suction, by J. M. DALLAVALLE Discussion Ventilation, Investigation of Air Outlets in Class Room, by G. L. LARSON, D. W. NELSON AND R. W. KUBASTA Discussion Ventilation Standards, A.S.H.V.E. Ventilators, A.S.H.V.E. Standard Code for Testing and Rating Steam Unit	387 394 463 486 383 25
w	
WALKER, J. H., SANFORD, S. S., AND WELLS, E. P., Field Studies of Office Building Cooling Discussion WALTON, H. L., AND SMITH, L. L., Discussion of Field Studies of Office Build-	285 311
ing Cooling	311 228
WATSON, M. B., Discussion of Loss of Head in Copper Pipe and Fittings	540
Wells, E. P., Walker, J. H., and Sanford, S. S., Field Studies of Office Building Cooling Discussion	285 311
West, Perry, Discussion of Coefficients as Affected by Direction of Wind	45
WILLARD, A. C., Discussion of Tests of Convectors in a Warm Wall Testing Booth WILLIAMS, J. M., Discussion of Automatic Gas Burners Wind Velocity Gradients Near a Wall, Natural, by J. L. BLACKSHAW AND	528 556
F. C. HOUGHTEN Discussion WOLF, S. K., Discussion of Acoustical Problems in the Heating and Ventilat-	397 409
ing of Buildings	226
Y	
YAGLOU, C. P., BENJAMIN, L. C., AND CHOATE, S. P., Changes in Ionic Content of Air in Occupied Rooms Ventilated by Natural and by Mechanical Methods	191
Discussion	201
Rooms Ventilated by Natural and by Mechanical Methods	209
Charts (Report of Tech. Adv. Com. on Re-Study of Comfort Chart and Comfort Line)	410

INDEX TO TRANSACTIONS

573